

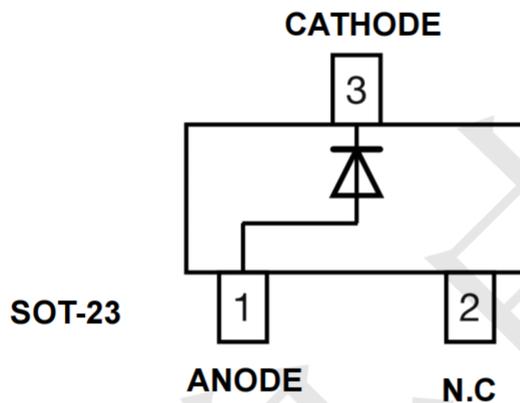
Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- RoHs Product

Applications

- Surface mount schottky barrier rectifier
- Buck and Boost dc-dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit

Pin Configuration (Top View)



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	0.5	A
Non-repetitive Peak Forward Surge Current	I_{FSM}	5.5	A
	$t \leq 8.3ms$		
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	$^{\circ}C/W$
Operating Junction Temperature Range	T_J	125	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

Mounted onto a 4 in square FR-4 board 10 mm sq. 1 oz. Cu 0.06" thick single sided. Operating to steady state.

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=500\mu A$	40	--	--	V
Forward Voltage	V_F	$I_F=0.1A$	--	--	0.4	V
		$I_F=0.5A$	--	--	0.5	V
Reverse Leakage	I_R	$V_R=40V$	--	--	20	μA
Capacitance terminals	C_T	$V_R=40V, f=1MHz$	--	170	--	pF
Reverse recovery time	t_{rr}	$I_F=500mA, V_R=6V, R_L=6\Omega$	--	5.6	--	ns

Typical Electrical Characteristic Curves

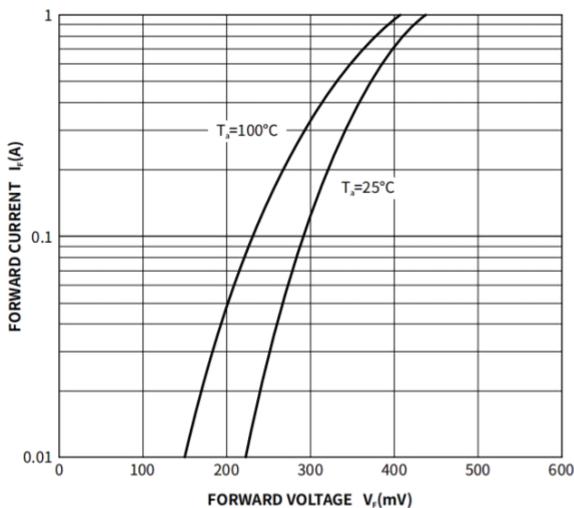


Fig.1 Typical Instantaneous Forward Characteristics

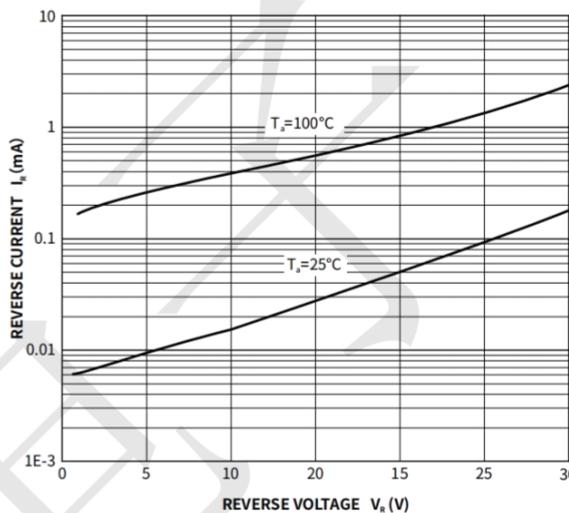


Fig.2 Typical Reverse Characteristics

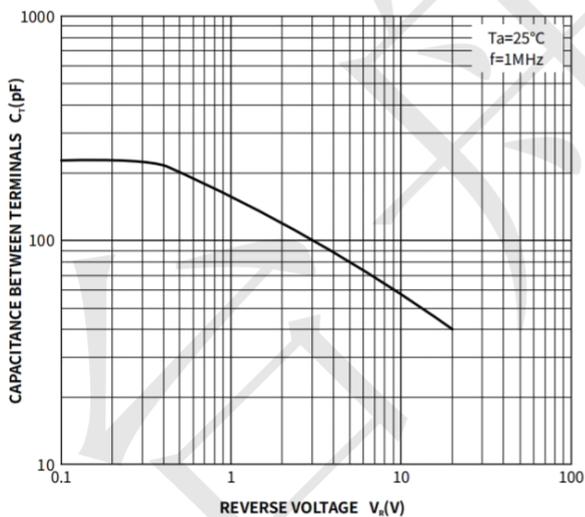


Fig.3 Typical Junction Capacitance

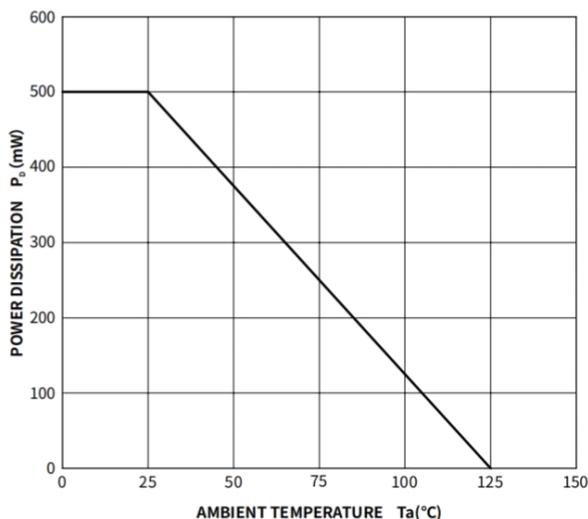
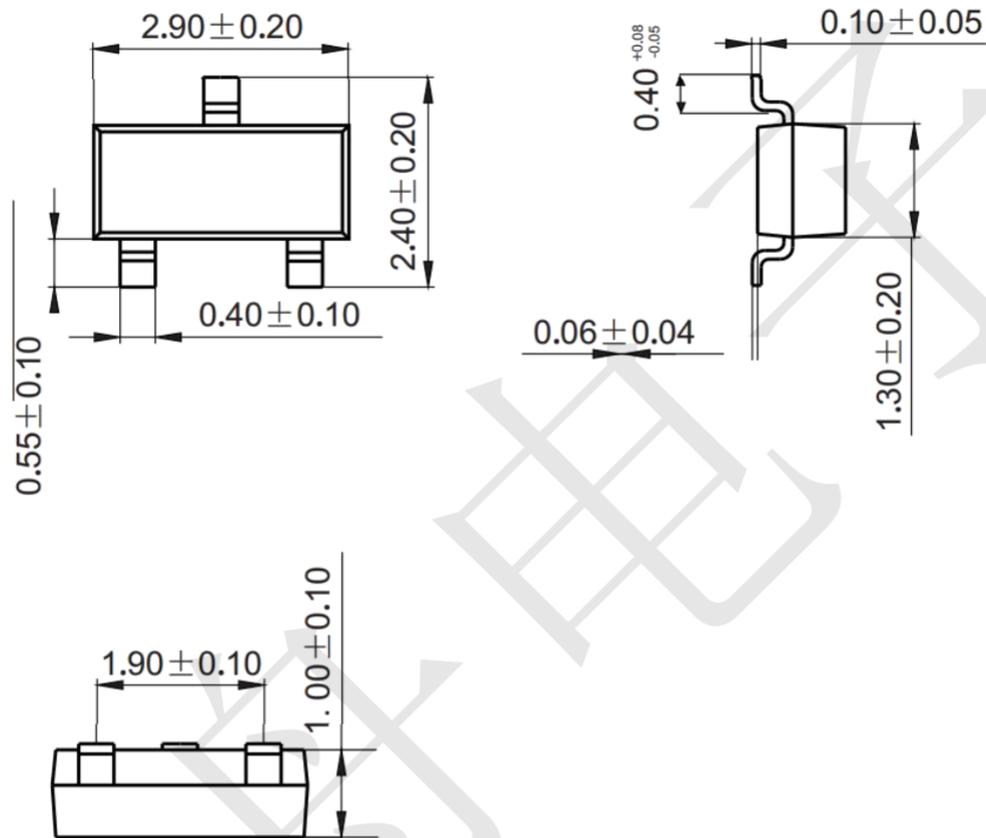


Fig.4 Power Derating Curve

Package Outline Dimensions (unit: mm)

SOT23



Mounting Pad Layout (unit: mm)

